Abstract

Hyperspectral imaging calibration devices and methods for their use are
described that generate images of three dimensional samples. A calibration device
may assume the shape of a desired imaging sample such as a body part and may be
sterile prior to placement. The calibration device may include openings or may be
modified to expose a region of the sample during use. Spectral images, typically
obtained at multiple wavelengths, are made of the calibration device. Algorithms are
provided that utilize the spectral images of the calibration device to determine the
effects of lighting conditions and sample shape on the sample image to form a
calibrated image. Calibrated images produced by these devices and methods can
provide information, including clinical data that are less sensitive to lighting and
sample shape compared to alternative technologies.

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